

CLAIM AMENDMENTS

IN THE CLAIMS

This listing of the claims will replace all prior versions, and listing, of claims in the application or previous response to office action:

1. (Previously Presented) A method of controlling power consumption of a group of information handling systems that use a common power source, the method comprising:

storing an aggregate power limit for a group of information handling systems, the storing comprising storing trip point data that corresponds to a current trip point for a shared circuit breaker;

monitoring individual power consumption levels for the information handling systems, the monitoring comprising monitoring computers that draw power from the shared circuit breaker;

automatically calculating an aggregate power consumption for the group of information handling systems, based on the individual power consumption levels;

automatically determining whether the aggregate power consumption for the group of information handling systems approaches the aggregate power limit;

in response to determining that the aggregate power consumption approaches the aggregate power limit, automatically selecting at least one information handling system among the group for power reduction; and

in response to determining that the aggregate power consumption approaches the aggregate power limit, automatically communicating with the selected information handling system to cause the selected information handling system to reduce power consumption.

2. (Original) A method according to Claim 1, wherein the operation of monitoring individual power consumption levels for the information handling systems comprises:

receiving power information from the information handling systems via a power line.

3. (Original) A method according to Claim 2, wherein the power line that carries the power information comprises a conductor that provides power from the circuit breaker to the information handling systems.

4. (Original) A method according to Claim 1, wherein the operation of automatically communicating with the selected information handling system to cause the selected information handling system to reduce power consumption comprises:

communicating with the selected information handling system via a power line.

5. (Original) A method according to Claim 1, wherein the operation of monitoring individual power consumption levels for the information handling systems comprises:

receiving power information reported from a power level detection module within each of the information handling systems.

6. (Original) A method according to Claim 1, wherein the operation of monitoring individual power consumption levels for the information handling systems comprises:

reading power information from at least one device within at least one of the information handling systems.

7. (Original) A method according to Claim 6, wherein the operation of reading power information from at least one device within at least one of the information handling systems comprises:

obtaining extended display identification data from the device.

8. (Original) A method according to Claim 1, further comprising:

storing a power limit for at least one of the information handling systems in the at least one information handling system during a manufacturing process, before shipping the at least one information handling system to a customer.

9. (Original) A method according to Claim 1, further comprising:

storing a power priority setting for at least one of the information handling systems in the at least one information handling system, during a manufacturing process, based on information provided by a customer, before shipping the at least one information handling system to the customer.

10. (Original) A method according to Claim 1, further comprising:

storing individual power limits for the information handling systems in the information handling systems during a manufacturing process, based on information regarding a deployment environment for the information handling systems, before shipping the information handling systems to a customer; and

storing individual power priority settings for the information handling systems in the information handling system, during a manufacturing process, based on information regarding the deployment environment for the information handling systems, before shipping the information handling systems to the customer.

11. (Original) A method according to Claim 1, wherein the operation of monitoring individual power consumption levels for multiple information handling systems comprises:

receiving a slave power packet from at least one of the information handling systems, the slave power packet including a request for permission to modify power consumption.

12. (Original) A method according to Claim 11, wherein the operation of automatically and dynamically determining whether the aggregate power consumption approaches the aggregate power limit comprises:

determining whether the request for permission to modify power consumption, if granted, would exceed the aggregate power limit.

13-17. (Cancelled)

18. (Previously Presented) An information handling system with support for dynamic power throttling, the information handling system comprising:

multiple slave computers that draw power from a shared circuit breaker having a predetermined trip point, each slave computer containing a power level detection module and a power control module; and

a master computer containing a power level manager, wherein the master computer automatically and dynamically adjusts power thresholds for each of the slave computers, to prevent the slave computers from exceeding the trip point of the shared circuit breaker;

wherein each of the power level detection modules is operable to communicate with a power level manager; and

wherein the power control module is operable to communicate with the power level manager, wherein:

the power level detection modules monitor power consumption for the information handling system;

the information handling system automatically transmits power level data to the power level manager, based on the monitored power consumption;

the power control module receives power control data from the power level manager; and

the power control module automatically adjusts power consumption of the information handling system, in accordance with the power control data received from the power level manager.

19. (Original) An information handling system according to Claim 18, wherein the power control data comprises a power threshold setting.

20. (Original) An information handling system according to Claim 18, further comprising:

a power supply that converts alternating current to direct current; and
wherein the power level detection module resides within the power supply.

21. (Original) An information handling system according to Claim 18, further comprising:

a power line data interface in communication with a power line; and
wherein the power control module receives the power control data from the power level manager via the power line data interface.

22. (Previously Presented) An information handling system according to Claim 21, further comprising:

a power supply that converts alternating current from a source of electricity to direct current; and
wherein the power line data interface resides within the power supply.

23-25. (Cancelled)

26. (Previously Presented) A method for dynamically throttling current draw of computers on a common circuit, the method comprising:

receiving current information from current level detection modules of multiple computers on a common circuit;

in response to receiving the current information, automatically computing an adjusted current threshold setting for at least one of the computers;

in response to computing the adjusted current threshold setting, automatically transmitting the adjusted current threshold setting to a current control module for the at least one computer;

automatically determining whether an aggregate current draw of the multiple computers approaches a breaker threshold for a breaker on the common circuit; and

if the aggregate current draw approaches the breaker threshold, automatically transmitting the adjusted current threshold setting to at least one of the computers, to prevent the aggregate current draw of the multiple computers from exceeding the breaker threshold.

27-28. (Cancelled)

29. (New) A method of controlling power consumption of a group of information handling systems that use a common power source, the method comprising:

storing an aggregate power limit for a group of information handling systems;

monitoring individual power consumption levels for the information handling systems including reading power information from at least one device within at least one of the information handling systems;

automatically calculating an aggregate power consumption for the group of information handling systems, based on the individual power consumption levels;

automatically determining whether the aggregate power consumption for the group of information handling systems approaches the aggregate power limit;

in response to determining that the aggregate power consumption approaches the aggregate power limit, automatically selecting at least one information handling system among the group for power reduction; and

in response to determining that the aggregate power consumption approaches the aggregate power limit, automatically communicating with the selected information handling system to cause the selected information handling system to reduce power consumption.

30. (New) An information handling system with support for dynamic power throttling, the information handling system comprising:

a power level detection module operable to communicate with a power level manager;

a power line data interface in communication with a power line; and

a power control module operable to communicate with the power level manager, wherein:

the power level detection module monitors power consumption for the information handling system;

the information handling system automatically transmits power level data to the power level manager, based on the monitored power consumption;

the power control module receives power control data from the power level manager via the power line data interface; and

the power control module automatically adjusts power consumption of the information handling system, in accordance with the power control data received from the power level manager.